



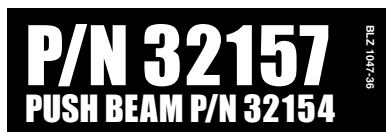
VEHICLE UNDERCARRIAGE INSTALLATION INSTRUCTIONS

**JEEP CHEROKEE XJ (1984-2001)
JEEP WAGONEER LTD (1984-1993)
JEEP COMANCHE MJ (1986-1992)**

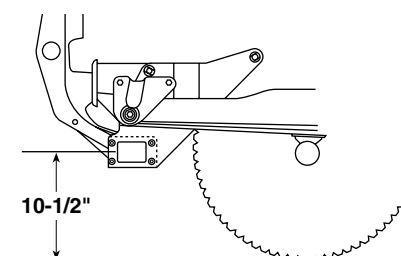
**UNDERCARRIAGE PART NO.
32157
HARDWARE KIT PART NO.
61463**

SEE REVERSE FOR ADDITIONAL INSTALLATION INSTRUCTIONS

UNDERCARRIAGE INSTALLATION INSTRUCTIONS



A label identifying the undercarriage assembly part number and push beam part number is applied to the rear of the push beam.



The recommended push beam height for this undercarriage assembly is 10-1/2" from the center of the push beam to level ground. DO NOT exceed 12-1/2" in height for this undercarriage.



WARNING: Always perform vehicle undercarriage installations with the keys removed from the vehicle's ignition. Properly tag the ignition switch to alert others work is being performed on the vehicle.

Most newer trucks are equipped with driver and passenger's side air bags. DO NOT remove, disable, or reposition any sensory equipment related to the safe operation of the air bags.

ALWAYS follow the vehicle manufacturer's recommendations for installing snowplowing equipment.

FAILURE TO COMPLY WITH THE ABOVE WARNINGS MAY RESULT IN SERIOUS INJURY OR DEATH.

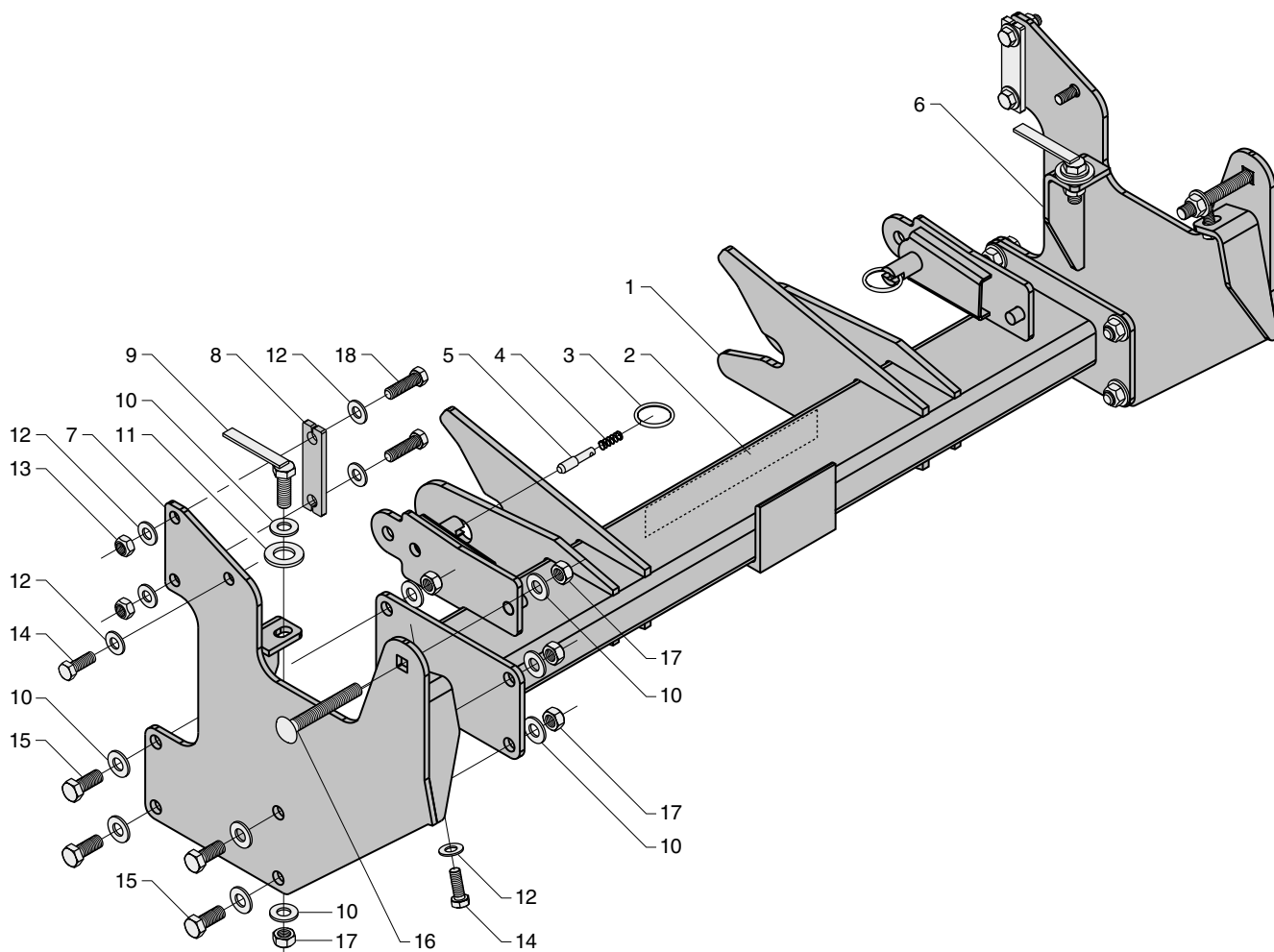


CAUTION: If your vehicle is equipped with oversize tires, they may come into contact with the undercarriage hanger plates when turning the vehicle.

The problem may be resolved by setting the steering stops on the vehicle. If this does not correct the problem, the original tires will need to be installed on the vehicle.

1. Begin the assembly by removing the bumper.
2. Remove the three bolts that secure each BUMPER MOUNT BRACKET to the outside of the frame rail. Discard these original fasteners.
3. Next, position the BOLTING PLATE inside of each frame rail. The holes in the plate should align with the two front holes for the bumper mount bracket. Position the driver's side HANGER PLATE between the frame rail and bumper mount bracket. The plate and bracket will locate to the outside of the frame rail. Align the holes in the bolting plate, frame, hanger plate and bumper mount bracket and secure all using two 7/16"-14 x 1-1/2" bolts with four 7/16" washers and two top lock nuts. Finger tighten the fasteners until all undercarriage parts are in place.
4. Place one M10-1.5 x 30 bolt and 7/16" washer through the remaining (rear) hole in the bumper mount bracket. The bolt will thread into a welded nut at the inside of the frame rail.
5. Align the square hole, at the rear of the hanger plate, to the hole in the frame rail and position one 1/2"-13 x 3-1/2" CARRIAGE BOLT through the hanger plate and frame. Secure the bolt with a 1/2" washer and top lock nut.
6. Once the hanger plate is attached to the truck frame rail, proceed to place one 1/2"-13 x 1-1/2" bolt with welded tab, 1/2" washer and 3/4" washer into the end of the frame rail and through the bottom, front hole in the rail. Secure the tabbed bolt with one 1/2" washer and top lock nut.
7. Thread one M10-1.5 x 30 bolt and 7/16" washer through the rear hanger plate mount hole located under the truck frame rail. The bolt will thread into a welded nut located on the inside of the frame rail.
8. Repeat steps #3 through #7 for the passenger's side hanger plate.
9. Next, align the holes in the PUSH BEAM with those in the hanger plates and secure each side using four 1/2"-13 x 1-1/4" bolts, eight 1/2" washers and 1/2" top lock nuts. *Note: Use a hydraulic floor jack to help facilitate the installation procedure.*
10. Once the undercarriage has been positioned and all hardware is in place, proceed to tighten all top lock nuts. Reference the chart on page 4 for maximum bolt torque.
11. Position the LIGHT TOWER into the mount pockets on the push beam. Each pocket has a lock pin that secures both light tower arms. Pull out and twist each ring handle to temporarily unlock the pins. Place the light tower into the pockets and relock the pins. Mount each PLOW HEAD-LIGHT to the light tower with the hardware kit provided.

Complete the assembly by plugging the connectors from the snowplow headlights into the connectors on the vehicle wire harness. Adjust both lights with the plow in the raised position.



UNDERCARRIAGE PARTS LIST

Ref. No.	Part No.	Qty.	Part Description
N/A	32157	1	Assembly, Undercarriage: Nos. 1-18
1	32154	1	Push Beam Weldment 2 x 4 x 32.63
2	63162	1	Decal, Push Beam, 1-1/2" x 6-1/2"
3	61309	2	Ring, Standard Split, 1-1/4" O.D., 1-1/16" I.D., SS
4	61000	2	Spring, Compression, 0.94" O.A.F.L. x 0.36" O.D., 0.029" Wire DIA., SS
5	40079	2	Pin, 3/8" DIA. x 1-3/4", SS
6	32158	1	Plate, Hanger, Passenger's Side
7	32156	1	Plate, Hanger, Driver's Side
8	32151	2	Plate, Bolting
9	61151	2	Screw, Hex Head Cap, 1/2"-13 x 1-1/2" Grade 8, YZ with Welded Tab
10	61026	22	Washer, SAE Mil-Carb High-Strength, 1/2", 1-1/16" O.D., 17/32" I.D., YZ
11	61304	2	Washer, SAE Mil-Carb High-Strength, 3/4", 1-15/32" O.D., 13/16" I.D., YZ
12	61162	12	Washer, SAE Mil-Carb High-Strength, 7/16", 59/64" O.D., 15/32" I.D., YZ
13	61154	4	Nut, Top Lock, 7/16"-14 Grade C, Z
14	61460	4	Screw, Hex Head Cap, M10-1.5 x 30 Grade 8.8, Z
15	61057	8	Screw, Hex Head Cap, 1/2"-13 x 1-1/4" Grade 8, YZ
16	61418	2	Bolt, Carriage, 1/2"-13 x 3-1/2" Grade 8, P
17	61020	12	Nut, Top Lock, 1/2"-13 Grade C, Z
18	61459	4	Screw, Hex Head Cap, 7/16"-14 x 1-1/2" Grade 8, YZ
N/A	61463	1	Kit, Hardware - Undercarriage P/N 32157: Nos. 8-18

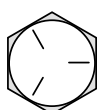
Note: The reference numbers listed identify parts shown in the illustration above. These numbers are specific to this illustration only. Always review the part number given for proper component identification. Blizzard Corporation reserves the right, under its Continuous Improvement Policy, to change construction or design details and furnish equipment when so altered without reference to illustrations or specifications.

HEADLIGHT CONVERSION HARNESS GUIDE

VEHICLE APPLICATION	HEADLIGHT CONNECTOR(S)	HEADLIGHT DESCRIPTION	HEADLIGHT NUMBERS	CONVERSION HARNESS
1984-2001 CHEROKEE XJ 1984-1993 WAGONEER LTD 1986-1992 COMANCHE MJ	2B/2D	DUAL RECTANGULAR HEADLAMP AND DUAL ROUND HEADLAMP	6014, H6024, H6059, 6052, H6054, HP6054	62220
1985-1998 WAGONEER	LF/UF	QUAD LOW PROFILE RECT. HALOGEN	H4701, H4703	62225

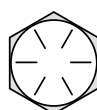
Note: Headlight conversion harness kits are not included with undercarriage mounts. All headlight conversion harness kits sold separately.

TORQUE SPECIFICATIONS



Grade Identification Marking for J429 - Grade 5 Bolt

- Material: Medium carbon steel: quenched and tempered
- Minimum Proof Strength: 85,000 psi
- Minimum Tensile Strength: 120,000 psi
- Core Hardness Rockwell (min.): C25, (max.): C34
- Minimum Yield Strength: 92,000 psi



Grade Identification Marking for J429 - Grade 8 Bolt

- Material: Medium carbon alloy steel: quenched and tempered
- Minimum Proof Strength: 120,000 psi
- Minimum Tensile Strength: 150,000 psi
- Core Hardness Rockwell (min.): C33, (max.): C39
- Minimum Yield Strength: 130,000 psi

Nominal Thread Size	SAE J429 - Grade 5			Nominal Thread Size	SAE J429 - Grade 8		
	Clamp Loads (lbs.)	Tightening Torque			Clamp Loads (lbs.)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
1/4-20	2,000	75 in-lbs	100 in-lbs	1/4-20	2,850	107 in-lbs	143 in-lbs
5/16-18	3,350	157 in-lbs	210 in-lbs	5/16-18	4,700	220 in-lbs	305 in-lbs
3/8-16	4,950	23 ft-lbs	31 ft-lbs	3/8-16	6,950	32.5 ft-lbs	44 ft-lbs
7/16-14	6,800	37 ft-lbs	50 ft-lbs	7/16-14	9,600	53 ft-lbs	70 ft-lbs
1/2-13	9,050	57 ft-lbs	75 ft-lbs	1/2-13	12,800	80 ft-lbs	107 ft-lbs
9/16-12	11,600	82 ft-lbs	109 ft-lbs	9/16-12	16,400	115 ft-lbs	154 ft-lbs
5/8-11	14,500	113 ft-lbs	151 ft-lbs	5/8-11	20,300	159 ft-lbs	21 ft-lbs
3/4-10	21,300	200 ft-lbs	266 ft-lbs	3/4-10	30,100	282 ft-lbs	376 ft-lbs
7/8-9	29,435	321 ft-lbs	430 ft-lbs	7/8-9	41,550	454 ft-lbs	606 ft-lbs
1-8	38,600	482.5 ft-lbs	640 ft-lbs	1-8	54,540	680 ft-lbs	900 ft-lbs



Grade Identification Marking for Metric - Grade 8.8 Bolt

- Material: Medium carbon steel: quenched and tempered
- Minimum Proof Strength: 580 MPa
- Minimum Tensile Strength: 800 MPa
- Core Hardness Rockwell (min.): C22, (max.): C32
- Minimum Yield Strength: 640 MPa



Grade Identification Marking for Metric - Grade 10.9 Bolt

- Material: Low carbon alloy steel: quenched and tempered
- Minimum Proof Strength: 830 MPa
- Minimum Tensile Strength: 1040 MPa
- Core Hardness Rockwell (min.): C32, (max.): C39
- Minimum Yield Strength: 940 MPa

Diameter (millimeters)	Metric Class 8.8			Diameter (millimeters)	Metric Class 10.9		
	Clamp Loads (Newton)	Tightening Torque			Clamp Loads (Newton)	Tightening Torque	
		“Lubricated”	“Dry”			“Lubricated”	“Dry”
5	6177	4.63 N-m	6.18 N-m	5	8840	6.63 N-m	8.84 N-m
6	8743	7.87 N-m	10.5 N-m	6	12512	11.3 N-m	15.0 N-m
7	12570	13.2 N-m	17.6 N-m	7	17990	18.9 N-m	25.2 N-m
8	15921	19.1 N-m	25.5 N-m	8	22784	27.3 N-m	36.5 N-m
10	25230	37.8 N-m	50.5 N-m	10	36105	54.1 N-m	72.2 N-m
12	36670	66.0 N-m	88.0 N-m	12	52475	94.5 N-m	125 N-m
14	50025	105 N-m	140 N-m	14	71587	150 N-m	200 N-m
16	70650	170 N-m	226 N-m	16	97732	235 N-m	313 N-m
18	86400	233 N-m	311 N-m	18	119520	323 N-m	430 N-m
20	110250	330 N-m	441 N-m	20	152513	458 N-m	610 N-m

Disclaimer: All torque values included in the charts above are advisory only, and their use by anyone is entirely voluntary. Reliance on the contents for any purpose by anyone is the sole risk of that person and Blizzard Corporation is not responsible for any loss, claim or damages arising therefrom. Blizzard Corporation has made an effort to present the above contents accurately, but we do not guarantee its completeness or validity. This information is subject to change at any time, without notice. Blizzard Corporation makes no representations or warranties, express or implied, in connection with the information.